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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/615,182 | 07/13/2000 | J. Peter Hansen | MSFT115463 | 3713 |

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EXAMINER

WOO, ISAAC M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2172

DATE MAILED: 04/09/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | | |
|-----------------|---------------|--|
| Application No. | Applicant(s) | |
| 09/615,182 | HANSEN ET AL. | |
| Examiner | Art Unit | |
| Isaac M Woo | 2172 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2003.
- 2a) ☐ This action is **FINAL**.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 16-23 is/are ~~withdrawn from consideration~~ cancelled.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This action is in response to Applicant's amendments, filed on March 21, 2003 have been considered but are deemed moot in view of new ground of rejections below.
2. The pending claims are 1-15 (claims 16-23 are canceled).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al (U.S. Patent No. 5,649,195, hereinafter, "Scott") in view of Zollinger et al (U.S. Patent No. 6,9321,236, hereinafter, "Zollinger").

With respect to claims 1 and 8, Scott discloses the method for dynamically synchronizing (col. 1, lines 5-8) a duplicated database stored on a server (master database) and a client computer (replica database, remote site, col. 1, lines 5-8, col. 1, lines 25-43, col. 2, lines 20-61), wherein the client computer database comprises a last

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server access time (col.1, lines 25-43) and a plurality of data objects and the server computer database comprises a creation time and a plurality of data objects, see (col. 2, lines 20-67 to col. 3, lines 1-67 to col. 4, lines 1-24);

selectively downloading data objects stored in the server computer database to the client computer database, if the client database last server access time indicates a time that is not earlier than a time indicated by the creation time of the server computer database, see (FIG. 2C, FIG. 6A-B, FIG. 7, col. 3, lines 10-53, col. 5, lines 8-45, col. 8, lines 45-67 to col. 9, lines 1-40, which teaches that there have been many updating database process between server and client database, which means the last server access time (updating) is not earlier than the server database creation time).

receiving a command for determining a database configuration, see (col. 2, lines 20-67 to col. 3, lines 1-67);

deleting the server computer database if the server computer contains a database and if the received command dictates that the server computer database be deleted, see (FIG. 3A, col. 1, lines 10-24, col. 6, lines 1-43);

copying a client computer database to the server computer, if the received command dictates that the client computer database be copied to the server computer, see (FIG. 3A, col. 1, lines 10-24, col. 6, lines 1-43). Scott discloses that downloading the server computer database to the client computer, see (col. 2, lines 20-67 to col. 3, lines 1-34). Scott does not explicitly disclose that if the client computer database last server access time indicates a time that is earlier than a time indicated by the creation time of the server computer database. However, Zollinger discloses that the synchronization

based on time stamp comparison the client database updating time (last server access time) with the other time stamp (used for indication) of file creation data on server database to assure the correct updates the client copy of the database, see (col. 11, lines 45-67 to col.12, 1-2), which teaches that with time stamp comparison between the client and the server to keep the database consistencies current. Therefore, it would have been obvious a person having ordinary skill in the art the time invention was made to combine if the client computer database last server access time indicates a time that is earlier than a time indicated by the creation time of the server computer database of the system of Zollinger with the system of Scott to download database records if the client database updates is earlier than the server database. In the distributed database system, maintaining and keeping the identical and integrity of database is important. Thus, database synchronization helps ensure that all copies of the databases are identical by downloading whole database from the server database to the new client database.

With respect to claims 2 and 9, Scott discloses that the updating the last server access time stored in the client computer database, wherein the updated last server access time corresponds to a clock time maintained by the server computer, see (col. 3, 9-67 to col. 4, lines 1-24).

With respect to claims 3 and 10, Scott discloses that the transmitting, from the client computer to the server computer, the last server access time stored on the client computer database, see (col. 1, lines 25-43).

With respect to claims 4 and 11, Scott discloses that the determining if the last server access time of one data object stored in the server computer database indicates a time later than a time indicated by the client computer last server access time (FIG. 2C, FIG. 6A-B, FIG. 7, col. 3, lines 10-53, col. 5, lines 8-45);

selectively downloading the one data objects stored in the server computer database to the client computer database, if the last server access time of the one data object stored in the server computer database indicates a time later than a time indicated by client database last server access time, see (FIG. 2C, FIG. 6A-B, FIG. 7, col. 3, lines 10-53, col. 5, lines 8-45, col. 8, lines 45-67 to col. 9, lines 1-40, which teaches that there have been many updating database process between server and client database, which means the last server access time (updating) is not earlier than the server database creation time).

With respect to claims 5 and 12, Scott discloses that the determining if the client computer database last server access time is within a predetermined period of time from a clock time maintained by the server computer, see (FIG. 6A-B, FIG. 7, FIG. 8, col. 8, lines 45-67 to col. 9, lines 1-39, col. 6, lines 4-67 to col. 7, lines 1-4); and

downloading the server computer database to the client computer, if the client computer database last server access time is not within a predetermined period of time from a clock time maintained by the server computer, see (FIG. 7, FIG. 8, col. 6, lines 4-67 to col. 7, lines 1-4, col. 8, lines 45-67 to col. 9, lines 1-39).

Claims 6, 14 (computer-readable medium claim), and 7-15 (computer-controlled apparatus claim) are rejected on grounds corresponding to the reasons given above for claims 1-5.

With respect to claim 13, although neither Scott nor Zollinger dose not explicitly disclose that the predetermined period of time is ninety days, it is merely design choice to set up predetermined period of time. Setting up the period of time for interval of access time is up to the system administrator's plan.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Everson et al (U.S. Patent No. 5,261,094) discloses the system for replicating changes made to databases distributed throughout a computer network is described. A first program (TP1) in the Collector node instructs a second program (TP2) in the


Collectee node to send all updates to a database since the last conversation. TP2 processes queries to retrieve any changes made since the last conversation between the Collector and Collectee nodes and send the data to TP1, which updates the copy of the database on its own system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M Woo whose telephone number is (703) 305-0081. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

IMW
April 4, 2003


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100